SAP Info Record, Source List, Quota Arrangement and Pricing Conditions

LOG-MM-003

Sep 04, 2008

LaGov

Version 1.0
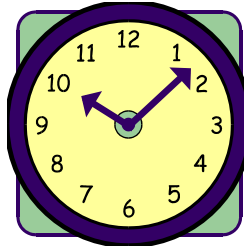Updated: 09/04/2008

Agenda

- Logistics, Ground Rules & Introduction
- Workshop Objectives
- Project Overview/Timeline
- Business Process Review
  - SAP terms glossary
  - Process improvement opportunities
  - SAP concepts & functionality
  - Leading practices
  - Enterprise readiness challenges
- Action Items
- Questions

Logistics

Before we get started ...

Ground Rules

- Has everybody signed in?
- Everybody participates – blueprint is not a spectator sport
- Focus is key – please turn off cell phones and close laptops
- Challenge existing processes and mindsets
- Offer suggestions and ideas
- Think *Enterprise*
- Ask questions at any time
- One person at a time please
- Creativity, cooperation, and compromise

Introductions

- **Roles:**
  - **Process Analyst and Functional Consultant (Team IBM):** Leads and facilitates the discussions; drives design decisions
  - **Documenter (State Employee):** Takes detailed notes to support the formal meeting minutes (to be sent by the Process Analyst to all participants for review and feedback)
  - **Team Members (LaGov):** Provides additional support for process discussions; addresses key integration touch points
  - **Subject Matter Experts:** Advises team members on the detailed business processes and participates in the decisions required to design the future state business processes
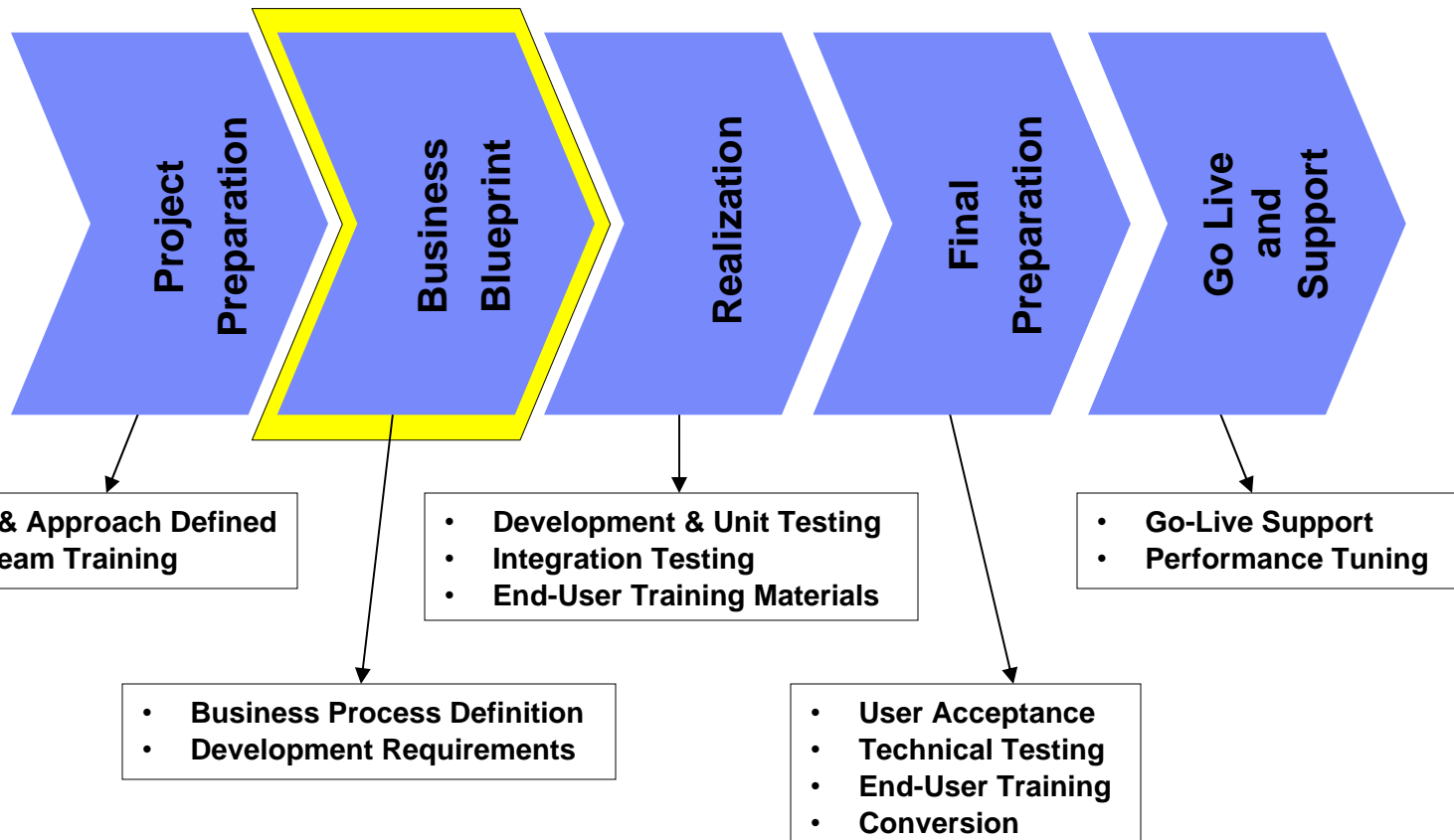
> ***Around the Room Introductions:***
>
> 1. *Name*
> 2. *Position*
> 3. *Agency*

Project Phases

■ Five Key Phases

Project Preparation → Business Blueprint → Realization → Final Preparation → Go Live and Support

- **Strategy & Approach Defined**
- **Project Team Training**

- **Business Process Definition**
- **Development Requirements**

- **Development & Unit Testing**
- **Integration Testing**
- **End-User Training Materials**

- **User Acceptance**
- **Technical Testing**
- **End-User Training**
- **Conversion**

- **Go-Live Support**
- **Performance Tuning**

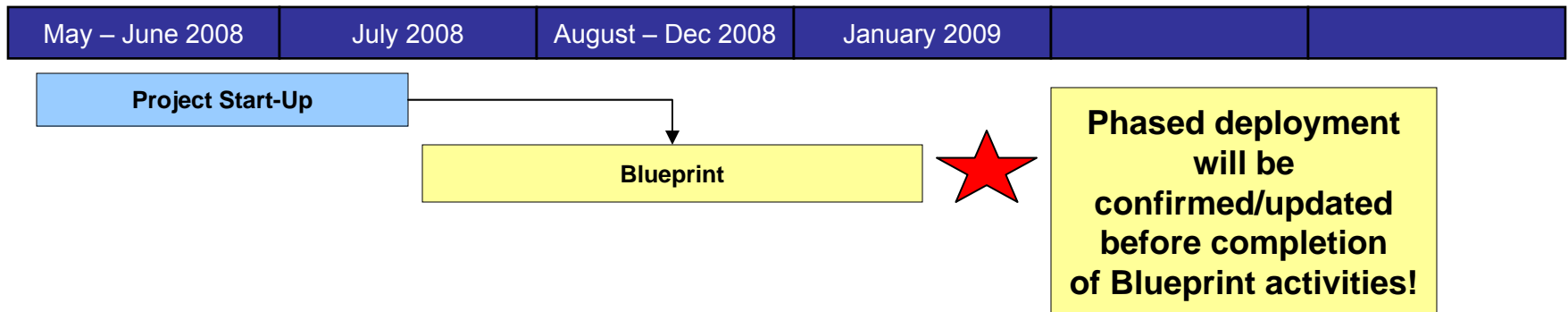# Tentative Project Timeline

- Tentative implementation dates are planned as follows:

Functionality	Tentative Implementation Date
Budget Prep	October 2009
DOTD	February 2010
Core Modules All Agencies	July 2010
Additional Modules	January 2011

May – June 2008	July 2008	August – Dec 2008	January 2009		

Project Start-Up

Blueprint

Phased deployment will be confirmed/updated before completion of Blueprint activities!

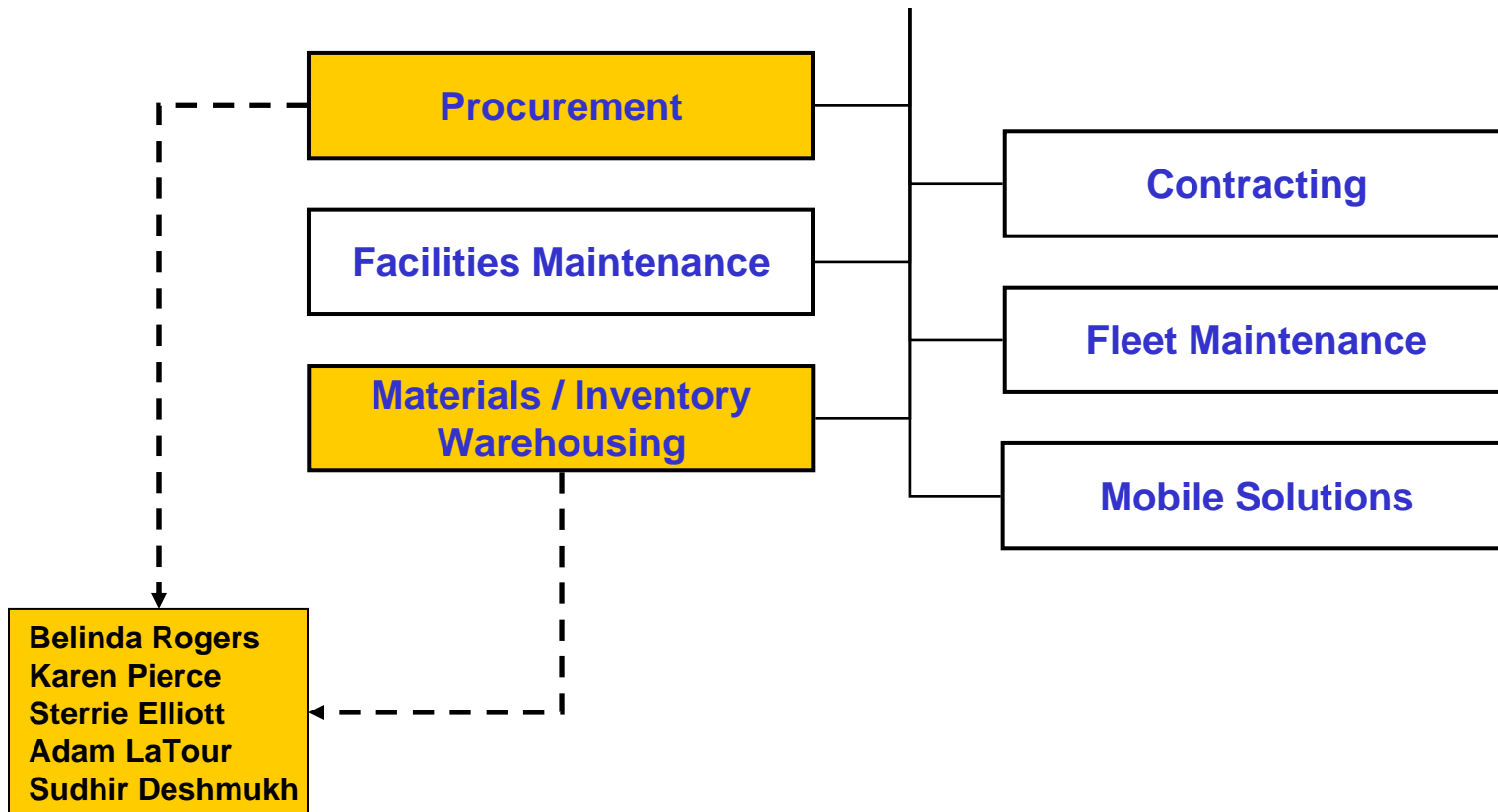# Project Organization - Functional Teams

Finance Leads

Beverly Hodges – Finance Lead
Drew Thigpen – Finance Lead
Mary Ramsrud – Consulting Lead

Logistics Leads

Belinda Rogers – Logistics Lead
Jack Ladhur – Logistics Lead
Brad Denham – Consulting Lead

Linear Assets Leads

Mark Suarez – Agile Assets Lead
Charles Pilson – Consulting Lead

Procurement

Facilities Maintenance

Materials / Inventory Warehousing

Contracting

Fleet Maintenance

Mobile Solutions

Belinda Rogers
Karen Pierce
Sterrie Elliott
Adam LaTour
Sudhir Deshmukh

Blueprint Schedule - Tentative

Workshop ID	Process Area	Date
LOG-SRM-002	Vendor Registration, Qualification, AVL (Approved Vendor List)	9/11 Thur 9/15 Mon 9/16 Tue 9/17 Wed **Are these dates correct based on new schedule?**

Blueprint Objectives

1. Review and discuss the current or <u>As-Is Business Processes</u>:
   - Which helps to drive out the ***business requirements***
   - As well as the ***integration points*** with other processes

2. Define <u>Master Data –</u> <u>Info Record, Source List, Quota Arrangement, Condition Records</u>:
   - Address key integration points
   - Support organizational requirements
   - Consistent and appropriate use of data fields

Blueprint Objectives

3. Define <u>Future</u> or <u>To-Be Business Processes</u> based on:
   - Best Practices inherent in SAP
   - Intellectual capital from other SAP implementations
   - State business requirements

4. Identify <u>Development Requirements</u>:
   - <u>F</u>orms
   - <u>R</u>eports
   - <u>I</u>nterfaces
   - <u>C</u>onversions
   - <u>E</u>nhancements
   - <u>W</u>orkflow

Blueprint Objectives (continued)

5. Understand and communicate any <u>Organizational Impact / Enterprise Readiness Challenges</u>

6. Gather system <u>Security Authorizations</u> and State-wide <u>Training Requirements</u>

Today's Workshop Objectives

- **Review State of Louisiana As-Is Glossary**

- **Overview of SAP Info Record, Source List, Quota Arrangement & Pricing Conditions**

- **Concepts of SAP info Record, Source List, Quota Arrangement and Pricing Conditions:**

  - Creation of Info Record, Source List, Quota Arrangement, Condition Record

  - Change Info Record, Source List, Quota Arrangement, Condition Record

  - Flag for Deletion Info Record, Condition Record

Today's Workshop Objectives

- Live SAP Info Record, Source List, Quota Arrangement, Condition Record
- Key Decisions
  - Number Ranges
  - Updates of Info Records
- Next Steps

As-Is Overview

Related As-Is Topics

- **Currently in Use**
  - Pricing Validity Date Limits, Future Pricing Validity Dates
  - Pricing Scales (i.e. 1-99 qty = $5 ea, 100-199 qty = $4 ea)
  - Minimum Quantity Restrictions
  - Under/Over Tolerances
  - No Cost Goods
  - Preconfigured Discounts

- **Not Currently in Use**
  - Quotas – percentages of orders for an item directed to multiple vendors
  - Consignment Items
  - Pipeline Items
  - Preconfigured Surcharges

AGPS Screenshots

AGPS Screenshots

AGPS Screenshots

SAP Concepts

SAP Glossary

➢ **Attribute** – A property or value that describes and defines an object or an entity in detail (blonde hair, blue eyes, 5'2" tall, 120 lbs…are all attributes of a human)

➢ **Client** – A grouping or combination of legal, organizational, business and/or administrative units with a common purpose; a self-contained unit in an SAP system with separate master records and its own set of tables ("The State of Louisiana")

➢ **Company Code** – This level represents an independent accounting unit within a client. Each company code has its own balance sheet and its own profit and loss statement. Example : a subsidiary company, member of a corporate group ("The State")

➢ **ECC** – Enterprise Central Component (the core SAP system where financials and most logistics transactions are processed

➢ **Info Record –** Also known as Purchasing Info Record (PIR)

➢ **Source –** In MM procurement External supplier or an outline agreement

➢ **Source List** – The source list contains the allowed, preferred and/or blocked sources of supply for a material in a plant that are valid within a certain period. Each source is defined in the source list by a source list record

➢ **Conditions –** Stipulations agreed with vendors concerning prices, discounts, surcharges etc. In this presentation it is also referred as Pricing Conditions.

➢ **Purchasing Organization** – An organizational unit in Logistics, subdividing an enterprise according to the requirements of Purchasing

SAP Glossary (continued)

➤**Outline Agreement** – It is a long term agreement with a vendor concerning the supply of a materials or performance of services according to a predetermined conditions. Outline agreement can be contract or scheduling agreement

➤**Quota Arrangement** - It indicates the percentages of a total requirement that are to be procured from each of the various sources over a period

➤**Schema** – Structure that defines the processing steps/calculations must be executed

➤**Pricing Procedure** – A rule type for pricing. Also referred simply as Pricing

➤**Condition Technique** – determination process for defining output values based on predefined input values via condition records

➤**Condition Type** - Identification that defines characteristics, attributes, and business meaning of a condition. Every condition type has its own access sequences, condition tables, and condition records

➤**Access Sequence** - Order in which the system should work through the condition tables when searching for particular condition records

➤**Condition Record** - Data record with input and output values for a task

➤**Scale** - Schema which determines a particular price, surcharge or discount or another condition depending on values, quantities, volumes, weight or points

"Going In" Logistics Structure

Company Code 0001 (State of LA)

Plant A001 (DOA)
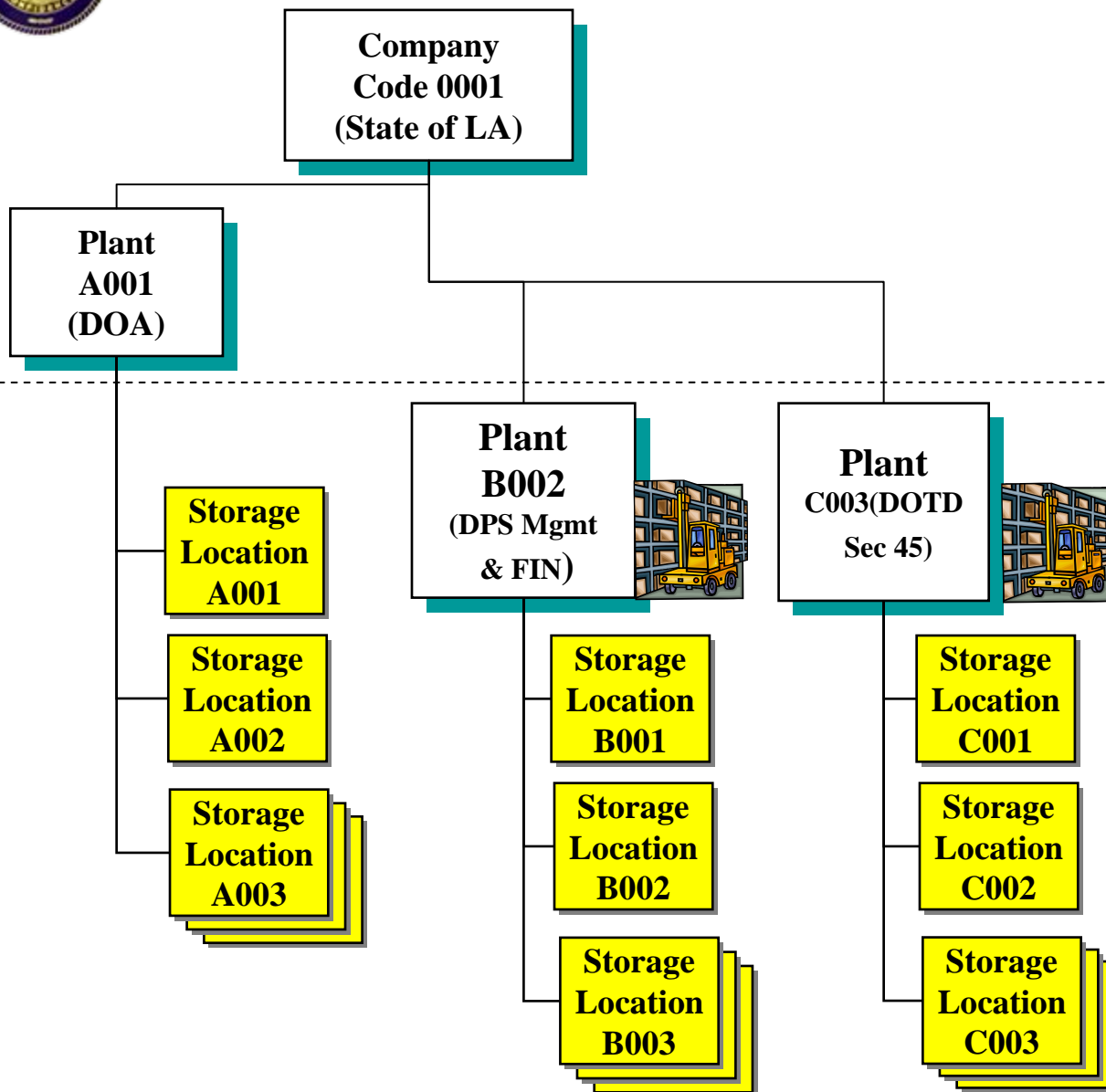
Department Level

- -

Agency Level

Plant B002 (DPS Mgmt & FIN)

Plant C003(DOTD Sec 45)

Storage Location A001

Storage Location A002

Storage Location A003

Storage Location B001

Storage Location B002

Storage Location B003

Storage Location C001

Storage Location C002

Storage Location C003

Guiding Principle: If a given organization maintains inventory AND it wants to track the financial costs of that inventory at a given level, then that organizational level = SAP Plant

Note: Physical inventory taking (conducting an inventory and cycle counting) takes place at the Storage Location level!

MM specific Master Data

- Master Data --

  Master data is the backbone for each transaction. Without master data transactions can not be performed. Transaction data is such as Purchase Requisitions, Purchase Orders etc.

  Examples of Master Data in Procurement --
  - Material master
  - Vendor master
  - Purchasing info records (also known as Info record)
  - Purchasing Groups
  - Source list
  - Quota arrangement
  - Condition records

Master Data in the Procurement Process

Purchase Order
Header
Items
10 -------------
20-------------

Material
Master record

Vendor
Master record

Info record
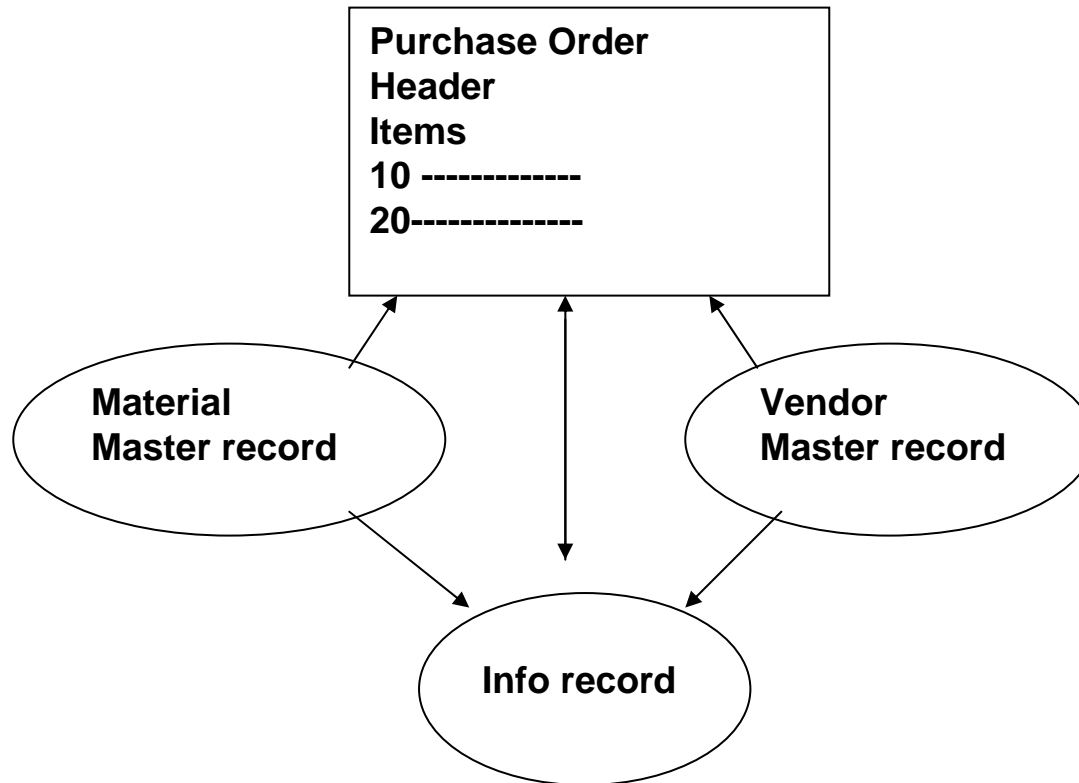
Master Data in the Procurement Process (contd)

- Master data contains data records that are stored in the data base for a long period of time. These are stored centrally and used in ECC. This prevents redundancy of data.

- The material master records and vendor master records are the most important master data in the procurement process.

- During purchasing document creation, ECC facilitates data entry by copying the data from existing master records as default values into the purchasing documents. It also copies units of measure and material short text from the material master. From the vendor master it also copies addresses and payment data. Particular data for a material from a vendor such as delivery time and purchase price can also be stored in **info records**.

Info Record

- It is created for the combination of material, vendor and purchase organization or

- It is created for the combination of material, vendor and purchase organization/plant combination.

- It can also be created with material group instead of material master record.

- It can be created manually or automatically during the maintenance of a quotation, a purchase order or an outline agreement.

- There are four info record categories: Standard, Subcontracting, Pipeline and Consignment.

Categories of Info Records

- Standard
  - A standard info record contains information for standard purchase orders. The info records can be created for materials and services with and without master records
- Subcontracting
  - A subcontractor info record contains ordering information for subcontract orders. For example, if you subcontract the assembly of a component, the subcontractor info record would include the vendor's (subcontractor's) price for assembling the component.
- Pipeline
  - A pipeline info record contains information on a vendor's commodity that is supplied through a pipeline or pipes (oil or water) or by similar means (electricity through the mains). The info record contains the vendor's price for the consumption of such commodities by the buyer ("pipeline withdrawals"). You can store withdrawal/usage prices for different validity periods.
- Consignment
  - A consignment info record contains information on a material that vendors keep available at their own cost on the orderer's premises. The info record contains the vendor's price for withdrawals by the orderer from consignment stock. As in the case of the pipeline info record, you can store prices for different validity periods.

Info Record – Number Ranges

SAP recommends the following number ranges :

- **for stock material**
  - internal from 5300000000 to 5399999999
  - external from 5400000000 to 5499999999

- **for non-stock material**
  - internal from 5500000000 to 5599999999
  - external from 5600000000 to 5699999999

At LaGov, we may choose only internal number ranges.

Structure of Info Record

General Data
Vendor data (reminder data, vendor's material number etc)
Material data
Order unit (conversion …)
Administrative data

Purchasing organization data
Control (delivery time, minimum quantity etc)
Prices & conditions (gross price, discount, freight etc)
Statistics (price history, PO statistics etc)
Texts (purchase order text etc)

Info Record

Purchasing organization / Plant data
Control (delivery time, minimum quantity etc)
Prices & conditions (gross price, discount, freight etc)
Statistics (price history, PO statistics etc)
Texts (purchase order text etc)

Structure of Info Record (contd)

- A Info Record contains general data that is valid for every purchasing organization or every plant.

- It also contains data (e.g. prices and conditions) that is only valid for the relevant purchasing organization or relevant plant. We configure whether conditions are permitted at a plant level.

- When we create a purchase order, the system searches for an info record for the purchasing organization/plant combination. If there is no such info record, the system searches for the purchasing organization only.

Structure of Info Record (contd)

- In the standard system, the following type of texts are set in the info record:

  – Internal info memo record – this is an internal comment that is copied to the purchase order item. This text is not printed out.

- PO text in the info record – this is used to describe the PO item. It is copied to the purchase order item and printed out.

Structure of Info Record (contd)

Material Purchasing data

Info Record

Vendor	Z
Material	1
Porch. Org	1000
- - - - - - - - - - - -
Price	5.00
PO Text	

Purch. Order

Vendor	Z
Purch org.	1000
Plant	2000
Material	1
Price	5.00

Info Record

Vendor	Z
Material	1
Purch. Org	1000
Plant	4000
- - - - - - - - - - -
Price	6.00
PO Text	

Purch. Order

Vendor	Z
Purch org.	1000
Plant	4000
Material	1
Price	6.00
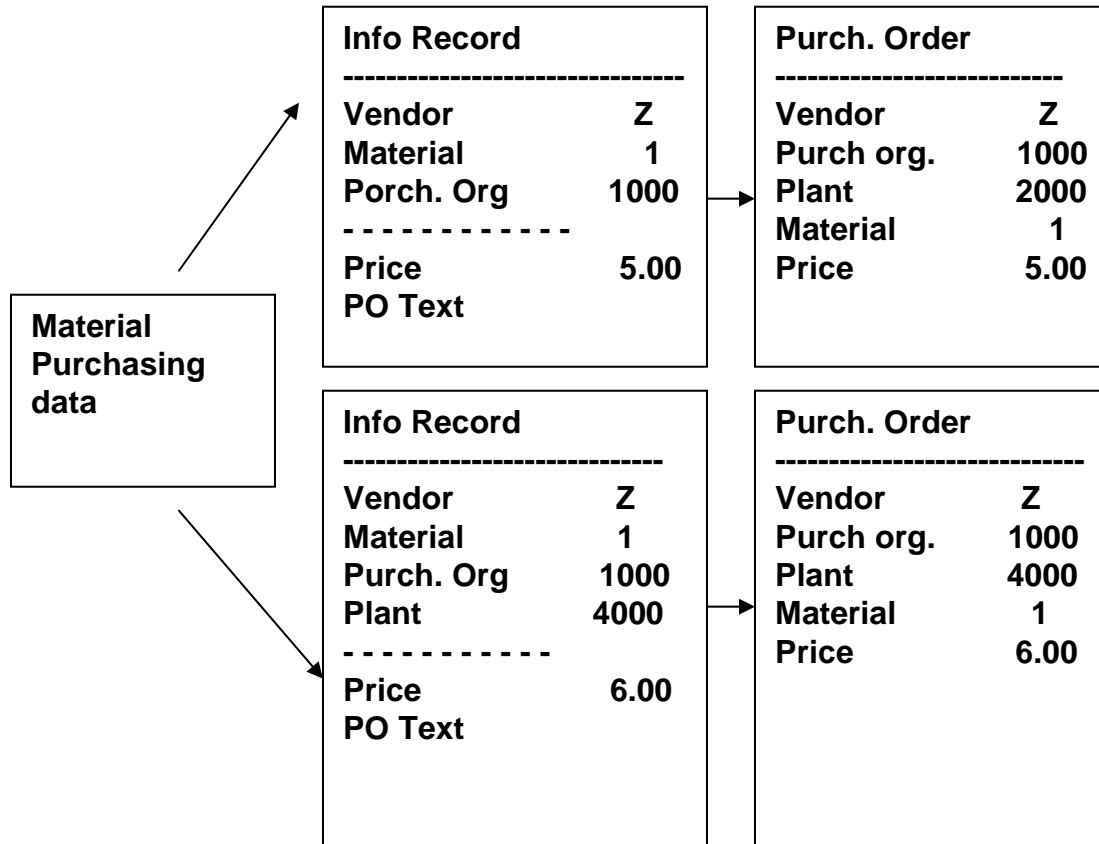
Info Record update

Updating an Info Record Automatically – (by selecting info update indicator on purchase order, quotation, scheduling agreements in item details)

```
Quotation
No. 60000001
1 EA U01  =  25 USD
Discount      3%
Info update
```

```
Purch. order
No. 4500000001
1 EA U01  =  25 USD
Discount      3%
Info update
```

Info Record

```
Vendor  9999
Material U01
Pur. Org. 1000
Plant
-------------------------
 Conditions
Price/UoM          25
USD /ea
Discount            3%


Last purchase order
4500000001
```
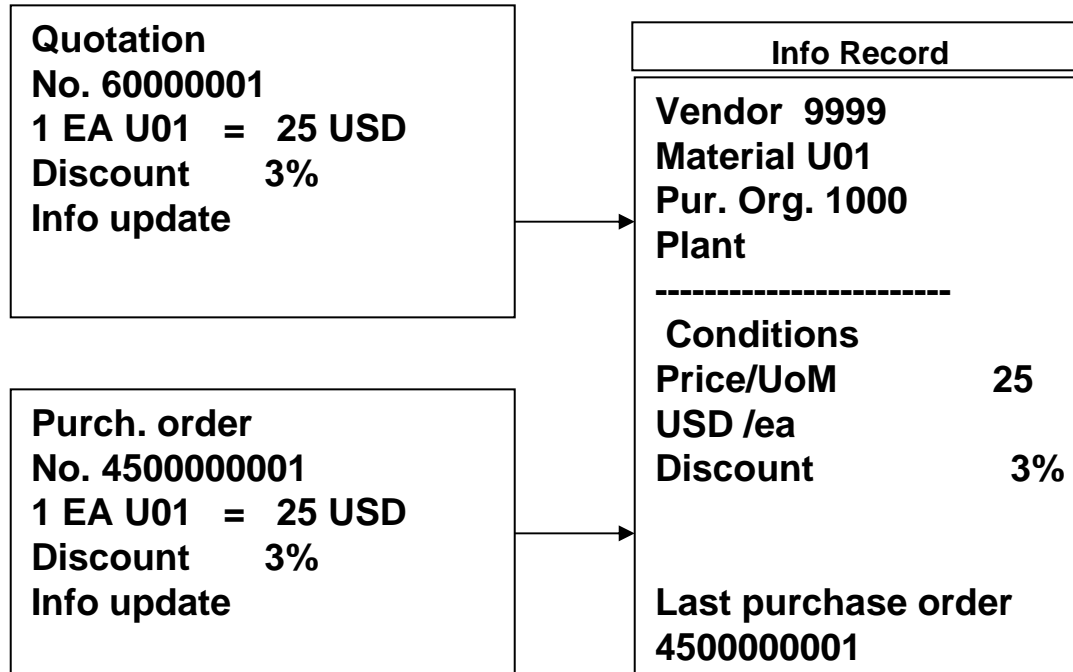
Info Record update (contd)

- When we create or change quotations and purchase orders, we can use the info update indicator to define that the info record is to be created or updated.

- The system copies the conditions from the quotations (or purchase orders and outline agreements) to the info record.

- The document number from a purchase order or contract release order is updated as the last purchasing document.

- If no info record exists for the combination of vendor, material and organizational level when we create or change a contract, the system creates an info record with the conditions from the contract.

Info Records and Prices

- Info records determine the prices suggested in purchasing documents in two ways:
  - Conditions : Conditions are included if they have been maintained for an info record manually or from a quotation.
  - Last purchase order : If an info record does not contain any conditions, the system reads
    - the number of the last purchasing document in the info record and then suggests the price from this document.
    - In the default values for buyers (customizing), we define how the system handles conditions from the last purchase order.

Info Records and Pricing Conditions

We can define that the conditions from the last purchase order

- Are always copied
- Are not copied when the price is entered manually
- Are never copied

Info Record without Material Master Record

Info record

Vendor   **Z**
Purch. Org   **3000**
(plant)
Info category : Standard

Material group : office supplies
Short text   : Napkin, white
Search string   : Napkin
Price   : 1.50
PO Text   : Napkin, 2 ply, size
                 A4, soft paper,
                 triple folded
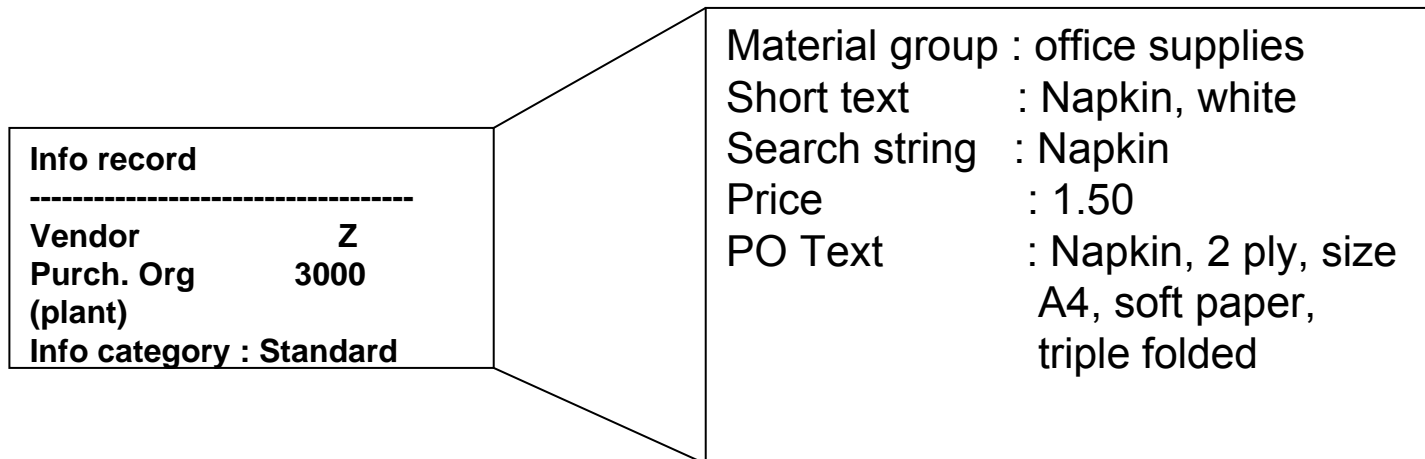
Info record without material master record (e.g. material for direct consumption).
This represents the relationship between a material group
(without a material master record) and a vendor.

Source Determination

- In SAP, a source of supply can be a vendor or an outline agreement.

- Sources are administered using source lists and quota arrangements.

- With the source list, we define the preferred or allowed sources of material.

- With the quota arrangement, we specify the share of total requirements over a period to be procured from each source.

- The purpose of source determination is to make it possible for a purchase requisition to be assigned to a source automatically.

Priorities in Source Determination

1 **Quota arrangement** ? 60% 40%

2 **Source List**

Source list

Purchase requisition → ▶ **Agreement item** ▶ **Fixed vendor**

3 Outline agreement?

Purchase requisition → ▶ **Agreement item**

4 **Info Rec**

1 piece %

Condition $

Purchase requisition → ▶ **Fixed vendor**
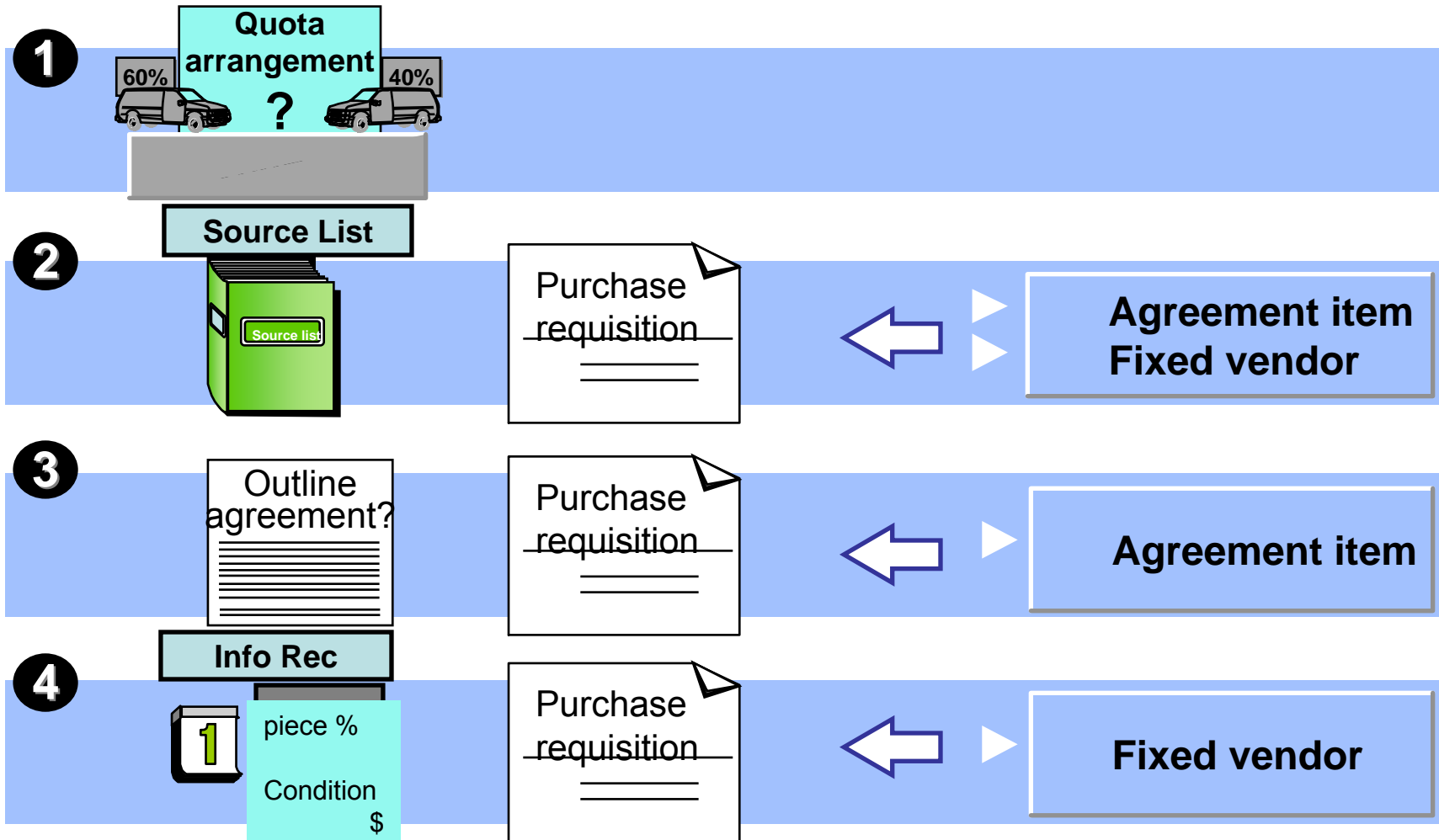
Master Data for Source Determination

Material	Plant

Vendor A

Vendor B
Info rec

Vendor C
Outline Agmt

<u>Source list</u>	<u>Quota Arr</u>
Permissible source	10% of requirement
Permissible Source	90% of requirement

Source List

Source list →	**Material 001** **Plant 2000** **----------------** **01/01/08 –12/31/08** **Vendor 111 allowed** **Vendor 222 allowed** **Vendor 333 blocked**

Material 002
Plant 2000

01/01/08—05/31/08
Vendor 444 fixed

06/01/08—12/31/08
Vendor 555   fixed

Plant 2000
Source list reqt   X

Material 001
Source list reqt   X

Source List (contd)

Contract		

Item cat	Short text	Mat grp
M	Office	OFFICE

– Maintain Source list –

Contract XXX
Item zz

Mat OFFICE Grp
Plant 2000
01/01/08—12/31/08

Exclusion of Materials

Mat 005
Mat 009
Mat 011

Source List (contd)

Change View "Source List/Plant": Overview

Plnt	Name 1	Source list
0010	PCC plant 0010	☐
0011	PCC plant 0011	☐
0030	DOTD Plant	☐

Position...   Entry 1 of 3

Source List at plant level

SPRO   doase1ci   INS

Source List (contd)

Display Material 9 (Spare parts)

Additional data   Organizational levels

Basic data 2   Purchasing   Foreign trade import   Purchase order...

| Material | 9 | Bearing, Ball, |
| Plant | 0010 | PCC plant 0010 |

General Data

Base Unit of Measure	EA	each	Order Unit		Var. OUn
Purchasing Group			Material Group	03	
Plant-sp.matl status			Valid from		
Tax ind. f. material			Qual.f.FreeGoodsDis.		
Material freight grp			☐ Autom. PO		
☐ Batch management					

Purchasing values

Purchasing value key			Shipping Instr.		
1st Rem./Exped.	0	days	Underdel. Tolerance	0.0	percent
2nd Reminder/Exped.	0	days	Overdeliv. Tolerance	0.0	percent
3rd Reminder/Exped.	0	days	Min. Del. Qty in %	0.0	percent
StdValueDelivDateVar	0	days	☐ Unltd Overdelivery	☐ Acknowledgment Reqd

Other data / manufacturer data

| GR Processing Time | 0 | days | ☐ Post to insp. stock | ☐ Critical Part |
| Quota arr. usage | | | ☐ Source list | JIT Sched. Indicator |

Source list and Quota arr. Usage Indicators on Purchasing view of a material master record

MM03   doase1ci   INS

Source List (contd)

Maintenance screen for Source List (ME01)

Source List (contd)

- The source list contains the allowed, preferred and/or blocked sources of supply for a material in a plant that are valid within a certain period.

- Source list records enables us to determine and check sources.

- Fixed sources are always preferred over other sources in the relevant validity period.

- Buyers are not allowed to procure from blocked sources. Blocked sources are not taken into account in source determination.

Source List (contd)

- The MRP indicator in the source list stipulates how the source defined in a source list record is taken into account in material planning.

- If the source list requirement exists, a material may not be procured from sources other than those included in the source list. A source list requirement can be specified either for an individual material (in the material master), or for all the materials of a plant (using a customization parameter).

Source List (contd)

- Source list records can be created manually, either directly or from within outline agreement or info record maintenance.

- If we maintain the source list from within a state agreed (central) contract, we can create source lists for several plants in a single process.

- We can create the source list for a material by referencing another material.

Source List (contd)

- Within the contract maintenance function, we can create source list records for a material group for contract items with the category M (material unknown) or W (material group).

- Source list records for material groups define which materials can be released against a contract item with item category M or W.

Quota Arrangement

Material 001
Plant 3000

Period 01/01/2008 -- 12/31/2008

                                                                To date:

Vendor 111   **60%**   **300**
Vendor 222   **40%**   **200**

Quota Arrangement (contd)

Manual maintenance →

Quota file

☐ **Validity period**

☐ **Procurement type**

☐ **Special Proc type**

☐ **Vendor**

☐ **Procurement Plnt**

☐ **Quota**

☐ **Quota base qty**

☐ **Quota-allocated qty**

Updating from Purch docs & planned orders →

→ **Defaults in Req via Source Determination function**
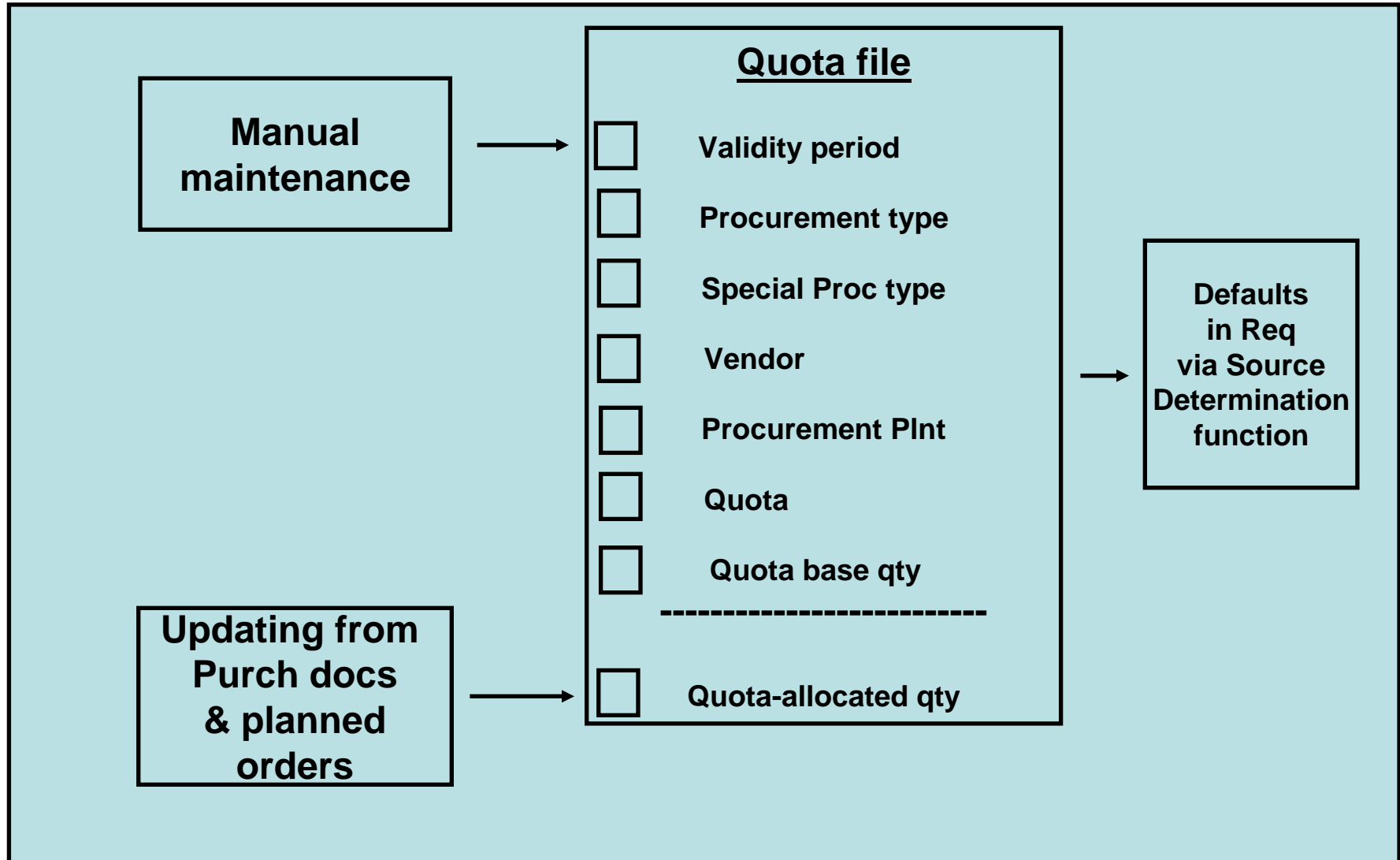
Quota Arrangement (contd)

Calculation of the Quota Rating

Quota Arrangement

Material   002   valid from 01/01/08
Plant   2000   valid to 12/31/2008

Vendor	Quota	Quota-Alloc qty
DDD	8	2000
EEE	2	200

Quota rating =
Quota-Alloc qty/Quota

The source with the lowest quota rating represents the effective source

Quota Arrangement (contd) Usage

Change View "Quota Arrangement Usage": Details

New Entries

Quota Arr.Usage   1

Detailed information
- ☑ Purchase order
- ☑ SA Schedule Line
- ☐ Planned order
- ☐ Purchase requisition
- ☐ MRP
- ☐ Production order

The purchasing functions that can be Assigned to a quota arrangement Usage key

SPRO   doase1ci   INS

Quota Arrangement (contd)

- If a certain material is to be procured alternately from different sources of supply, these individual sources can be assigned quotas. The quotas indicate the percentages of a total requirements that are to be procured from each of the various sources over a period.

- A quota arrangement is set up for a specific timeframe. A quota arrangement item is created for each source of supply within the period. Only consecutive validity periods can be specified for a material.

- SAP recommended standard internal number range for quota arrangement is between 8000000001 to 8999999999.

Quota Arrangement (contd)

- For a quota arrangement to be applied to a material, the 'quota arrangement usage' indicator must be set in the material master record. This indicator specifies quota arrangement application as well as the quota allocated quantity to be updated progressively.

- With quotas, the system calculates which source is next in line with respect to certain requirement.

- A quota arrangement item is no longer suggested as the source if the quota-allocated quantity is equal to or greater than the maximum quantity.

Conditions

```
              ┌─────────────────────┐
              │    Conditions       │
              └─────────────────────┘
           ↙           ↓           ↘
┌──────────────┐ ┌──────────────────────┐ ┌──────────────────────┐
│   Pricing    │ │ Message Determination│ │ Batch Determination  │
└──────────────┘ └──────────────────────┘ └──────────────────────┘
        ↓                   ↓                        ↓
┌──────────────┐ ┌──────────────────────┐ ┌──────────────────────┐
│ Condition Type│ │     Message Type     │ │    Strategy Type     │
│ Calculation   │ │ Message Determination│ │   Search Procedure   │
│ Schema        │ │        Schema        │ │                      │
│ Pricing       │ │                      │ │                      │
│ Procedure     │ │                      │ │                      │
└──────────────┘ └──────────────────────┘ └──────────────────────┘
```
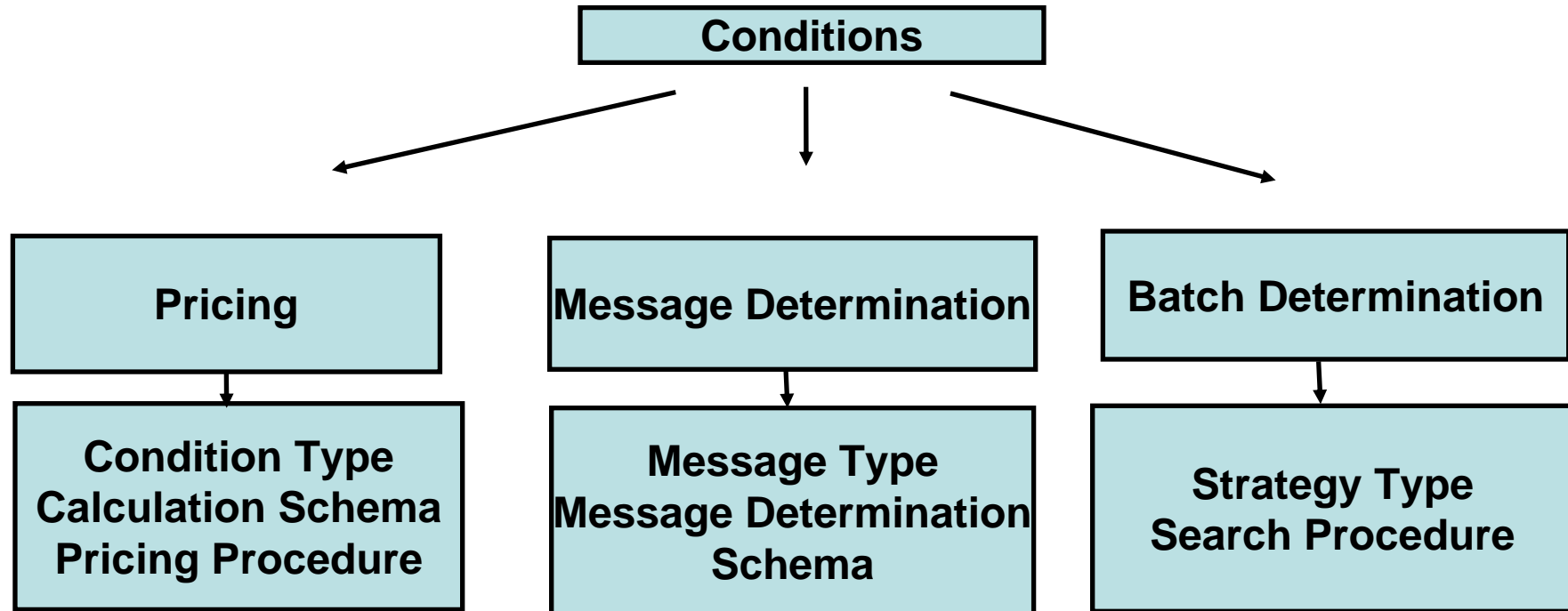
The condition technique is used not only in pricing in the MM purchasing application, it is also used in message determination and batch determination.
   In this presentation "Conditions" refers to "pricing conditions" only.
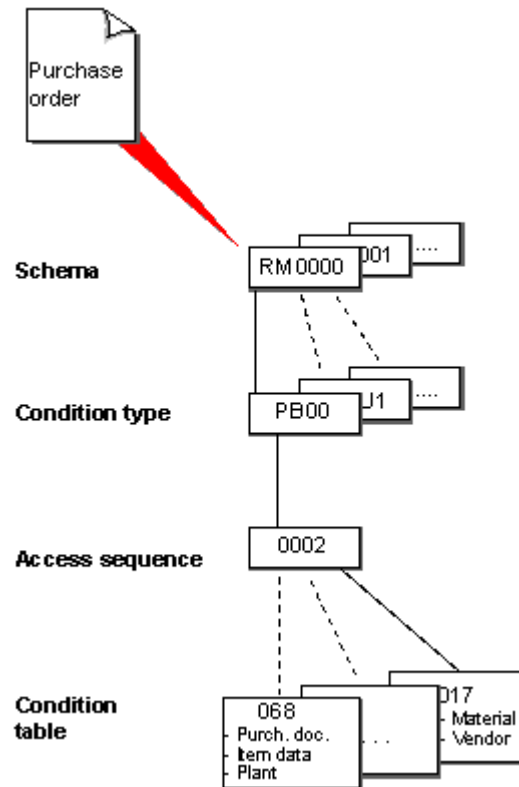
Pricing Conditions

- Pricing describes the price and cost

- Pricing is controlled with condition technique

- Condition technique is used to determine the total cost of purchase in MM

Following are the important components

- Schema
- Condition Type
- Access sequence
- Condition Table/Condition Record

Price Determination Process (Pricing)

■ **Schema**

- In the MM area, a calculation schema - a framework of steps used to calculate or determine something - is used among other things to calculate costs, prices, period-end rebates, and taxes.

- In the calculation schema (pricing procedure), you specify which condition types are to be taken into account in which sequence. In the price (or cost) determination process, the SAP System automatically determines which calculation schema is valid for a business transaction and takes into account, one after another, the condition types it contains

Price Determination Process (contd)

- **Condition Type**

  The individual conditions are described by means of condition types. There are condition types for the gross price, various discounts and surcharges, freight charges, fixed costs and so on

  Condition type is a four letter key that controls

  - Calculation type
  - Type of changes allowed
  - Scale basis

  Condition type contains access sequence

- **Access Sequence**

  - There can be more than one table used to define different field combination
  - It is required to search more than one table to fetch a record
  - Defining the sequence in which these tables are to be accessed is known as access sequence

Price Determination Process (contd)

- **Condition Table/Condition Record**
  - Condition table specifies the fields combination
  - System searches through predefined tables in a sequence
  - It is defined in the configuration
  - Condition records is a master data
  - Maintaining values for the condition table is known as condition record

Create Quota Arrangement
Transaction Code MEQ1

Maintain Quota Arrangement: Initial Screen

  Header

Material
Plant

Enter material
And plant
Click continue

MEQ1 | doase1ci | INS

Create Quota Arrangement (contd)

Maintain Quota Arrangement: Overview of Quota Arr. Periods

Item   New Period

| Material | 98 | Uniform medium |
| Plant | 0010 | PCC plant 0010 |

Quota arrangement periods

Valid from	Valid to	Minimum qty split	Quota Arr.
	09/30/2008	4	

Add valid to date
and click continue
Select the line item and
click on Item button

MEQ1 doase1ci INS

Create Quota Arrangement (contd)

Maintain Quota Arrangement: Overview of Quota Arr. Items

New Entries | Header | ▶ Next Overview

Material	98	Uniform medium
Plant	0010	PCC plant 0010
		Base Unit	EA
Valid from	09/10/2008	Valid to	09/30/2008
		Minimum Qty	6.000

Quota Arr. Items

QAI	P	S	Vendor	PPI	PVer	Qu...	in %	Allocated Qty	Maximum Quantity	Quota Base Qty	Max. Lot Size	Min. Lot Size	RPro	1x	Max. Rel. Qty	N..	P	Pr
1	F		TESTVEN1			75	75.0	0.000	80.000	40.000				☐				
2	F		TESTVEN2			25	25.0	0.000	50.000	20.000				☐				

Enter Procure Type
F –for external
Vendor, Quota qty in %
Maximum quantity
Quota base quantity
click continue

MEQ1 doase1ci INS

Create Quota Arrangement (contd)

Maintain Quota Arrangement: Initial Screen

Header

Material	98
Plant	0010

Click Save

Quota arrangement maintained successfully

MEQ1   doase1ci   INS

Change/Delete Quota Arrangement

- Quota arrangement is changed using transaction code MEQ1

- Deletion of Quota Arrangement record is achieved by using MEQ1 and deleting each item in item details by selecting the item and clicking on trash can

- All the changes made can be viewed using MEQ4 Changes to Quota Arrangement

Create Source List
Transaction Code ME01

Material   53
Plant   0010

Enter material and plant
Click to continue

Source list changed   ME01   doase1ci   INS

Create Source List (contd)

Maintain Source List: Overview Screen

| Material | 53 | Cups |
| Plant | 0010 | PCC plant 0010 |

Source List Records

Valid from	Valid to	Vendor	POrg	PPl	OUn	Agmt	Item	Fix	Blk	M...	MRP Area
09/10/2008	09/30/2008	TESTVEN1	0010		EA						

Enter Valid from and to
Dates, Purch Org
and order unit
and save

All source list records OK

ME01   doase1ci   INS

Create Source List (contd)

Material   53
Plant   0010

Source list changed
Message appears

Source list changed   ME01 doase1ci INS

Change/Delete Source List (contd)

- Changes to source list are made using transaction code ME01.

- Deletion of source list record is achieved by using ME01 and deleting each item by selecting the item and clicking on trash can

- All the changes made can be viewed using ME04 Changes to Source List

- **Conditions**
  - As used in the SAP system, the term "conditions" relates to prices, surcharges, and discounts. The condition technique is a flexible pricing instrument for purchasing, allowing the processing of both simple price structures and more complex interrelationships
  - Conditions can be defined at a variety of levels. The levels most commonly encountered are pre-defined in the standard version of MM for determining prices, discounts, and surcharges
  - Conditions can be stored for one or all the materials supplied by a vendor

Conditions (contd)
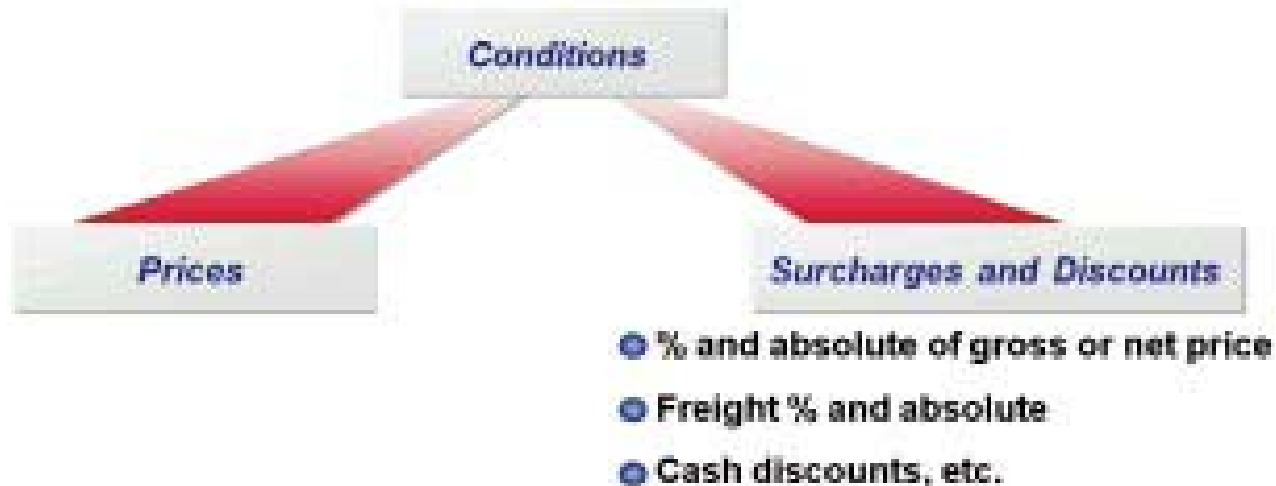
- The pricing conditions pre-defined in the standard system covers discounts and surcharges (percentage or absolute amount), delivery costs, cash (prompt payment) discount, and taxes.
- However, the standard version can be extended to support specific requirements for determining pricing automatically

Conditions (contd)

- **Conditions and Price Determination**

  This component enables you to store pricing stipulations agreed with the vendor (such as applicable discounts or surcharges, or stipulations regarding the payment of freight costs) in the system. You can enter these conditions in quotations, outline purchase agreements, and info records. You also have the option of entering general conditions at vendor level, for example. The system then applies the conditions in determining the price in purchase orders (POs). You can enter further conditions in the PO itself

- **There are three kinds of prices in Purchasing:**

  Gross price : Price without taking any possible discounts and surcharges into account

  Net price : Price taking any applicable discounts and surcharges into account

  Effective price : Net price after deduction of cash discount, with allowance for any miscellaneous provisions, delivery costs, and non-deductible taxes

Conditions (contd)

- **Time-Dependent and Time-Independent Conditions**
  - A distinction is made between conditions that are valid for a certain period and conditions for which no special validity period can be specified. In the latter case, the validity period corresponds to that of the purchasing document. Whether time-dependent or time-independent conditions are created is determined via the document type
  - If you enter a percentage vendor discount in a PO, this is a time independent condition. However, if you enter this discount in a contract, the condition is time-dependent

- **Conditions Requiring Subsequent (End-of-Period) Settlement**
  - You can also store conditions that do not take effect immediately, but only at the end of a certain period. Settlement with regard to such conditions takes place subsequent to the settlement of vendor invoices relating to individual purchase orders

- **Conditions in Info Records use**
  - **Conditions Per Order Unit**
    - You can enter separate conditions for each order unit in the info record. During the source determination process, the system will then suggest the order unit for which prices have been maintained
    - If an info record contains prices for the order units "crate" and "pallet", for example, you can only order from this vendor in these units
    - If no conditions have been maintained for the order unit, you can order in the units maintained in the info record or in the material master record

- **Info Record Price Versus PO Price**
  - The net price in the info record and the net price in the purchase order are two different prices
  - The net price of an item in the info record is based on the conditions stipulated in the info record. If you change the conditions, the net price in the info record is recalculated and the pricing date adjusted accordingly
  - In contrast, the price in the purchase order may reflect the deduction of a quantity discount according to a price/quantity scale
  - As a rule, the conditions from the info record are adopted in the PO. However, if a price/quantity scale has been defined, the price for the relevant order quantity is taken

■ Variant Conditions

- You can maintain variant conditions for configurable materials. Using variant conditions, you can define discounts and surcharges for different material finishes for instance

- The vendor charges an extra $20 for bicycle frames with a silver metallic finish. This surcharge can be added to the price by means of a variant condition

Conditions (contd)

- **Master Conditions**

  - Master conditions are conditions that are of prime significance for purchase orders. The process of price determination is carried out using master conditions.

  - The conditions set out in info records are master conditions that apply to all Pos for a material issued to a vendor. Master conditions are also stored in contracts.

  - However, master conditions can also depend on combinations of different criteria, such as:

    - Purchasing organization

    - Vendor or invoicing party (if the invoicing party differs from the actual supplier of the goods)

Conditions (contd)

- Item-specific criteria such as material, material group, plant, or material type

- A specific contract item

Validity Period Conditions

- Validity Period Conditions are valid for a certain period. For example, a vendor's conditions can be defined for a specific year

- **Central Maintenance of Master Conditions**
  - Purchasing can maintain master conditions centrally, without having to change the conditions in each purchasing info record or contract relating to the vendor
  - Using this function, purchasing can quickly check a vendor's pricing strategy and quickly change prices and discount rates
  - You can determine a vendor's discounts and surcharges on a global basis. In this way, purchasing can define a global discount if the vendor grants a percentage or absolute discount on all POs placed with him

Conditions (contd)

- You can define conditions in advance. For example, you can store a vendor's price list for the next year in the system immediately. When the beginning of the validity period is reached, the new prices, discounts, and surcharges are automatically used in purchase price determination.

- For each condition, you can specify whether and to what extent manual changes Upper and Lower Limits to the price, discount, or surcharge that has been determined are permitted.

- Limits can be set in both percentages and absolute amounts.

Conditions (contd)

- Subsequent Settlement with Respect to Conditions

  A vendor's price can be recalculated after the PO is invoiced. For this reason, a distinction is made between conditions that are effective immediately upon receipt

  of the invoice and conditions effective at a later date. For example, volume rebates can be calculated at the end of a month or year – long after the invoice has been paid.

- Invoices for POs can also be settled retroactively (subject to the total purchase volume)

Condition Types

- The following are some of the condition types available in SAP R/3. Most are maintained directly on the purchase order by the buyer or in a vendor rebate agreement. We can create our own condition types when necessary.

    - PB00 Gross Price
    - FRA1 Freight
    - A001 Rebate (quantity)
    - RL01 Vendor discount %
    - R000 Discount % on gross
    - RA00 Gross % on net
    - RB00 Absolute discount

Condition Types - Example

Condition Records and Condition Tables

Condition table A017 (info record with plant)

Cond. ty.	Vendor	Material	Pur. org.	Plant	. . .	Cond. rec. no.
PB00	A	1	1000	1000	. . .	1234

Condition table A018 (info record without plant)

Cond. ty.	Vendor	Material	Pur. org.	. . .	Cond. rec. no.
PB00	A	1	1000	. . .	4321

Table KONP (item conditions)

Cond. rec. no.	Cond. ty.	. . .	Cond. amount	. . .
1234	PB00	. . .	10.00	. . .
4321	PB00	. . .	11.00	. . .
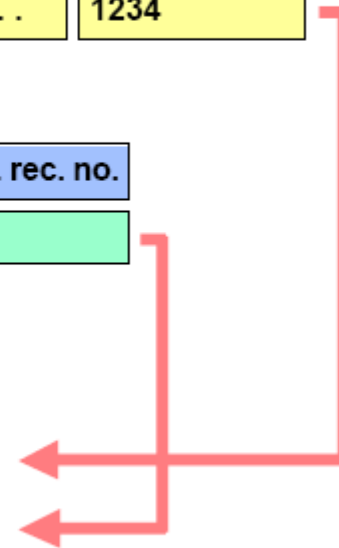
Price determination Process Overview
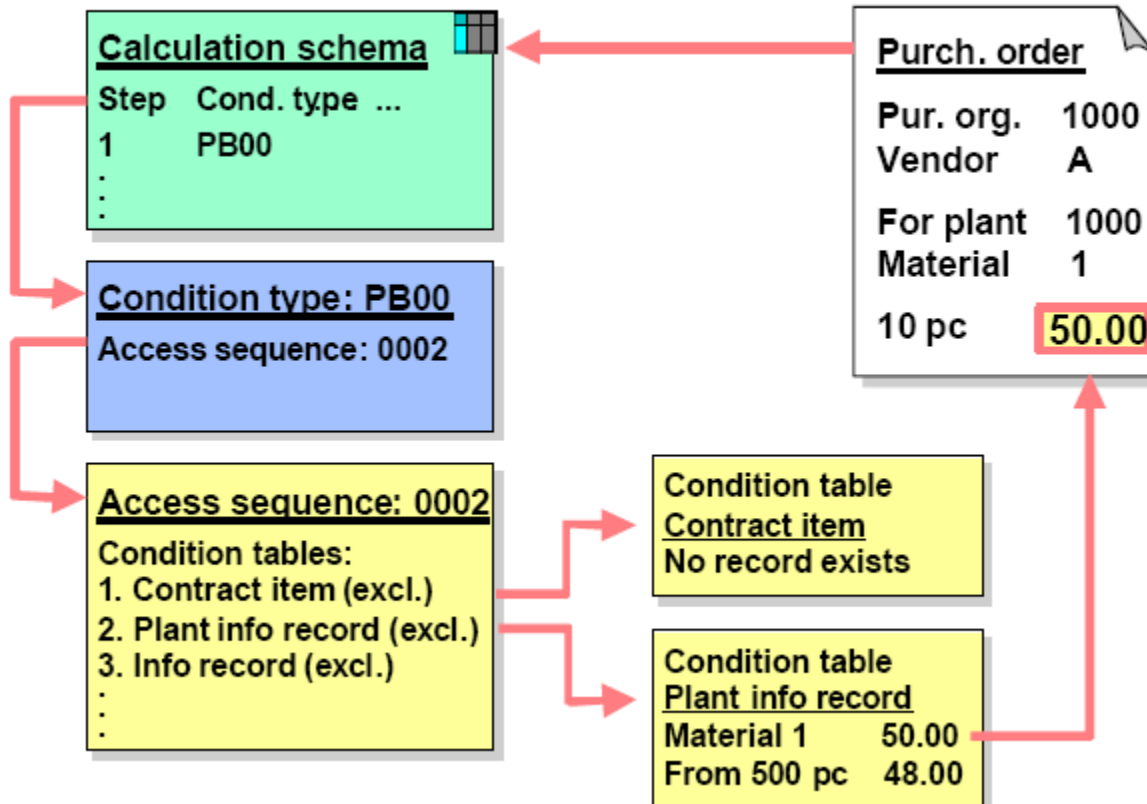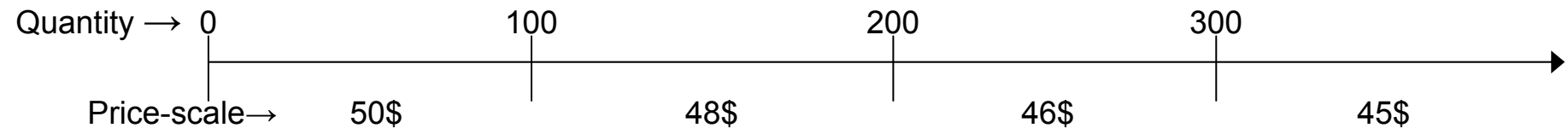
Scales

- In SAP a scale can only be <u>applied to a single Purchase Order</u> – not to more Purchase orders
- A scale is linked to a price condition

PO1 – 50$			
PO2 – 50$	PO2 - 48$	PO2 – 46$	PO2 - 45$
PO3 – 50$	PO3 - 48$		

Quantity → 0   100   200   300

Price-scale→   50$ 48$ 46$ 45$

Example:

PO1 with 80 items:	Total price = 80 x 50$	= 4.000 $
PO2 with 350 items:	Total price = 100 x 50$ + 100 x 48$ + 100 x 46$ + 50 x 45$	= 16.650 $
PO3 with 200 items:	Total price = 100 x 50$ + 100 x 48$	= 9.800$

SAP Info Record Screens

Info Record – Create
Initial screen (ME11)

Create Info Record: Initial Screen

Vendor

Material

Purchasing Org.

Plant

Info Record

Info category
- ◉ Standard
- ○ Subcontracting
- ○ Pipeline
- ○ Consignment

Required Entries
Vendor
Material
Purch. Org

Plant – optional

ME11   doase1ci   INS

Info Record – Create (contd)

Info Record – Create (contd)

Info Record – Create (contd)

Info Record – Create (contd)

Create Info Record: Text Overview

| General Data | Purch. Org. Data 1 | Conditions |

Info Record
Purchasing Org.   0010   Standard   Language   EN

Info record texts

TxtType	Text		More text	Status
☑ Info record note				
	Info Record Note Text Test			
				☐
☑ Purchase order text				
	PO Text test in Info record			
				☐

**No required entries
On this screen
Info record notes and
PO text
can be entered**

ME11   doase1ci   INS

94

Info Record – Create (contd)

Pricing conditions are entered e.g. Gross Price Freight Discount etc

Info Record – Create (contd)

After saving Info Record is created

Create Info Record: Initial Screen

Vendor	TESTVEN1
Material	100
Purchasing Org.	0010
Plant	
Info Record	

Info category
- ● Standard
- ○ Subcontracting
- ○ Pipeline
- ○ Consignment

Purchasing info record 5300000001 0010 created

ME11 doase1ci INS

Info Record – Change
Initial screen (ME12)

Change Info Record: Initial Screen

Vendor

Material

Purchasing Org.

Plant

Info Record

Info category
- ◉ Standard
- ○ Subcontracting
- ○ Pipeline
- ○ Consignment

**Enter Info Record
Number that
Requires change**

⊗ Purchasing info record 5300000002   does not exist

▷ | ME12 | doase1ci | INS

Info Record – Change (contd)

Change Gross Price Condition (PB00) : Condition Supplements

Variable key

Vendor	Material	POrg	...	Description
TESTVEN1	100	0010	0	Standard

Validity

Valid From	09/03/2008	Valid to	12/31/2009

Condition supplements

CnTy	Name	Amount	Unit	per	U...	DeletionID	Scales	Texts
PB00	Gross Price	50.00	USD	1	EA			
ZA00	Surcharge % on ...	1.000	%					
FRC1	Freight/Quantity	0.50	USD	1	EA		✓	

After entering Org Level via edit menu select conditions screen for conditions change

ME12 doase1ci INS

Info Record – Change (contd)

Change Info Record: Initial Screen

Vendor   TESTVEN1
Material   100
Purchasing Org.
Plant
Info Record

Info category
- ⦿ Standard
- ◯ Subcontracting
- ◯ Pipeline
- ◯ Consignment

**Save to complete
The changes**

Purchasing info record 5300000001   changed

ME12   doase1ci   INS

Info Record – Display
Initial screen (ME13)

Display Info Record: Initial Screen

Vendor

Material

Purchasing Org.

Plant

Info Record   5300000001

Info category
- ● Standard
- ○ Subcontracting
- ○ Pipeline
- ○ Consignment

Enter Info Record number

ME13   doase1ci   INS

Info Record – Display (contd)

**Enter Org Level
via initial screen
or via edit/org levels to
view
Purch Org Data 1,Conditions
screens**

Info Record – Display (contd)

Display Gross Price Condition (PB00) : Condition Supplements

Variable key

Vendor	Material	POrg	...	Description
TESTVEN1	100	0010	0	Standard

Validity

Valid From	09/03/2008	Valid to	12/31/2009

Condition supplements

	CnTy	Name	Amount	Unit	per	U...	DeletionID	Scales	Texts	
	PB00	Gross Price	50.00	USD	1	EA		☐	☐	
	ZA00	Surcharge % on ...	1.000	%				☐	☐	
	FRC1	Freight/Quantity	50.00	USD	1	EA		☑	☐	

After entering the Org. level Conditions and Purch Org Data screen is accessed

Info Record – Flag for deletion
Initial screen (ME15)

Flag Info Record for Deletion: Initial Screen

Vendor
Material
Purchasing Org.
Plant
Info Record   5300000000

Info category
- ◉ Standard
- ○ Subcontracting
- ○ Pipeline
- ○ Consignment

Enter Info Record number

ME15   doase1ci   INS

Info Record – Flag for deletion (contd)

Create Condition Record
Transaction Code MEK1

Create Condition Records

| Condition Information | Key Combination |

Condition type   Gross Price

MEK1   doase1ci   INS

Create Condition Record (contd)

Create Condition Records

Condition Information | Key Combination

Key Combination

- ⦿ "Empties" Prices (Material-Dependent)
- ○ Outline Agreement Item: Plant-Dependent
- ○ Contract Item
- ○ Plant Info Record per Order Unit
- ○ Material Info Record (Plant-Specific)
- ○ Info record per order unit
- ○ Material Info Record
- ○ Info Record for Non-Stock Item (Plant-Specific)
- ○ Info Record for Non-Stock Item

✔ ✖

Condition type   PB00   Gross Price

Enter condition type e.g. PB00
Click on Key Combination
And select e.g
Material Info Record
and continue

MEK1 | doase1ci | INS

Create Condition Record (contd)

Create Gross Price Condition (PB00) : Fast Entry

Vendor	TESTVEN1	ABC Corp.
Material	98	Uniform medium
Purch. Organization	0010	PCC Purch. Org.

Material Info Record

I..	Description	Amount	Unit	per	U...	C..	S..	Valid From	Valid to	D..	S..	S..	T..	E..	Pay...	Fix..	IDate	A..
0		25	usd		ea			09/09/2008	10/31/2008									
☑																		
☑																		
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**Enter Vendor
Material, P. Org
And select
0 for standard
Info Rec category
and make entries
Click on Details**

Select Rule   0 / 0

MEK1 | doase1ci | INS

Create Condition Record (contd)

Create Gross Price Condition (PB00) : Details

Variable key					
Vendor	Material	POrg	Plant	...	Description
TESTVEN1	98	0010	0010	0	Standard

Validity Period			
Valid From	10/01/2008	Valid to	10/31/2008

Amounts				
Amount	25.00	USD	per	1 EA
Lower limit	22.00			
Upper limit	26.00			

Control				
Calculation type	C	Quantity	☐	Deletion Indicator
Scale basis	C	Quantity scale	☐	Relevant to pricing
Scale Type	A	Base-scale		
Exclusion	X	Gross Price		

**Enter Upper & Lower Limits (optional)
Click on
Scales symbol
(fourth from left)**

MEK1 doase1ci INS

Create Condition Record (contd)

Create Gross Price Condition (PB00) : Scales

Variable key

Vendor	Material	POrg	Plant	...	Description
TESTVEN1	98	0010	0010	0	Standard

Validity

Valid From	10/01/2008
Valid to	10/31/2008

Control data

ScaleBasis	C	Quantity scale
Check		None

Scales

Scale Type	Scale quantity	U...	Amount	Unit	per	UoM	PricActive
From	1	EA	25.00	USD	1	EA	○
	100		25.00				○
	199		24.75				○
	299		24.50				○
	499		24.00				○

**Enter scales details
(optional entries)
And save
"Condition records saved"
message appears**

MEK1　doase1ci　INS

Change Condition Record
Transaction code MEK2

Change Condition Records

Condition Information	Key Combination	Select Using Index

Condition type   PB00   Gross Price

> **Enter transaction code
> MEK2
> Enter the condition type**

MEK2 doase1ci INS

Change Condition Record (contd)

Change Condition Records

| Condition Information | Key Combination | Select Using Index |

Condition type   PB00   Gross P

Key Combination

- ○ "Empties" Prices (Material-Dependent)
- ○ Outline Agreement Item: Plant-Dependent
- ○ Contract Item
- ○ Plant Info Record per Order Unit
- ● Material Info Record (Plant-Specific)
- ○ Info record per order unit
- ○ Material Info Record
- ○ Info Record for Non-Stock Item (Plant-Specific)
- ○ Info Record for Non-Stock Item

**Select Material info Record
after clicking on Key Combination
Click continue
(selected the record created previously)**

MEK2   doase1ci   INS

Change Condition Record (contd)

Change Gross Price (PB00): Selection

Vendor	TESTVEN1	ABC Corp.	
Material	98	Uniform medium	
Purch. Organization	0010	PCC Purch. Org.	
Plant	0010	PCC plant 0010	
Info record category	0	to	➡
Valid On	09/09/2008		

Enter Vendor, Material, Purch Organization, Plant and execute

MEK2 doase1ci INS

Change Condition Record (contd)

Change Gross Price Condition (PB00) : Overview

Vendor	TESTVEN1	ABC Corp.
Material	98	Uniform medium
Purch. Organization	0010	PCC Purch. Org.
Plant	0010	PCC plant 0010
Valid On	09/09/2008	

Material Info Record (Plant-Specific)

I.	Description	Amount	Unit	per	U...	C..	S..	Valid From	Valid to	D..	S..	S..	T..	E..	Pay...	FixValDate	A...
0	Standard	24.00	USD	1	EA	C	C	09/09/2008	09/30/2008			✓		X	NT30		

Select Rule   1 / 1

MEK2 doase1ci INS

Click on Details and change Upper Limit and save "Condition records Saved" appears

Condition Record for Deletion

Change Gross Price Condition (PB00) : Details

Variable key

Vendor	Material		POrg	Plant	...	Description
TESTVEN1	98		0010	0010	0	Standard

Validity Period

Valid From   09/09/2008   Valid to   09/30/2008

Amounts

Amount	24.00	USD	per	1	EA
Lower limit	22.00				
Upper limit	26.00				

Control

Calculation type	C	Quantity	☑ Deletion Indicator
Scale basis	C	Quantity scale	☐ Relevant to pricing
Scale Type	A	Base-scale	
Exclusion	X	Gross Price	

**Repeat the change process
Go to Details
Select the "Deletion Indicator" and save
"Condition records saved" appears**

**Deletion Indicator for Condition Item
Indicates whether the condition is no longer taken into account during document processing.
The condition is deleted during the next reorganization run.**

MEK2 doase1ci INS

Special Topics

Questions?